Summary Report

Evaluation of the Alberta Tobacco Reduction Strategy Tobacco Reduction Programs for Youth (2003)

AADAC
Alberta Alcohol and Drug Abuse Commission
An Agency of the Government of Alberta

SUMMARY REPORT

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This Summary Report is based on a more detailed, comprehensive report prepared by Howard Research and Instructional Systems Inc. Copies of the *Alberta Tobacco Reduction Strategy Evaluation of Tobacco Cessation, Prevention and Protection Programs for Youth: Final Report* are available by contacting the AADAC Tobacco Research Unit.

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TABLE OF CONTENTS

Acknowledgements

Executive Summary 5

- Introduction 5
- Key Findings, Conclusions and Recommendations 6
  - *I. Teaming Up for Tobacco-Free Kids* 6
  - *II. Building Leadership for Action in Schools Today (BLAST)* 8
  - *III. Youth Action and Advisory Project (YAAP)* 11
  - *IV. Kick the Nic* 13
- Future Implications 17

Introduction 19

Evaluation Methods 21

Program Description, Key Findings and Recommendations 23

- I. Teaming Up for Tobacco-Free Kids 23
  - *Program Description* 23
  - *Key Findings and Impacts* 24
  - *Conclusions* 26
  - *Recommendations from the Evaluation* 7
- II. Building Leadership for Action in Schools Today (BLAST) 27
  - *Program Description* 27
  - *Key Findings and Impacts* 29
  - *Conclusions* 33
  - *Recommendations from the Evaluation* 33
- III. Youth Action and Advisory Project (YAAP) 34
  - *Program Description* 34
  - *Key Findings and Impacts* 35
  - *Conclusions* 38
  - *Recommendations from the Evaluation* 39

IV. Kick the Nic 40

Program Description 40

Key Findings and Impacts 42

Conclusions 46

Recommendations from the Evaluation 47

Future Implications 49

References 51

Appendix A 53

List of communities in Alberta that had one or more of the four youth tobacco reduction programs implemented

Appendix B 55

List of school districts/divisions in Alberta that had one or more of the four youth tobacco reduction programs implemented

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EXECUTIVE SUMMARY

Introduction

In March 2002, the Alberta government launched the Alberta Tobacco Reduction Strategy (ATRS). The goal of the ATRS is to improve the health of Albertans and decrease health care and social costs by

- reducing the number of young people starting to smoke (prevention)
- encouraging and helping current tobacco users to quit (cessation)
- reducing nonsmokers' exposure to secondhand smoke (protection)

In the fall of 2002, AADAC implemented four provincial youth tobacco reduction programs.

1. Teaming Up for Tobacco-Free Kids (grades 4 to 6)
2. BLAST - Building Leadership for Action in Schools Today (grades 7 to 9)
3. YAAP - Youth Action and Advisory Project (age 14 to 17)
4. Kick the Nic (age 14 to 18)

AADAC Tobacco Reduction Counsellors (TRCs) implemented the programs throughout Alberta at the local level (schools and community groups). TRCs recruited youth, school staff, and community members and provided support, marketing, and resources for each program. Provincial Coordinators, liaising with AADAC, oversaw the program implementation at the provincial level and provided support to TRCs and program participants (youth participants and adult facilitators). Programs were located in 30[1] School Districts and 75 communities across Alberta.

In December of 2002, Howard Research and Instructional Systems Inc. was contracted by AADAC to complete process (implementation) and outcome (changes in knowledge, attitudes and behaviours) evaluations of the four youth programs. Data collection occurred between January and June 2003 and included 19 different surveys and 16 different interview guides for interviews and focus groups. The following table identifies the number of surveys administered and returned, and the number of interviews and focus groups conducted.

Complete evaluation results are available in the report *Alberta Tobacco Reduction Strategy (ATRS) Evaluation of Tobacco Cessation, Prevention and Protection Programs for Youth: Final Report*. This Summary Report summarizes the key findings, conclusions and recommendations arising from the evaluations.

1 One group was from a school on a First Nations Reserve and therefore fell under federal jurisdiction.

Table 1. Youth and Adult Surveys, Interviews, Focus Groups, and Site Visits

Surveys	Teaming Up	BLAST	YAAP	Kick the Nic	Total
Youth surveys administered	960	72	75	unknown	
Youth surveys completed	397	27	82	170 pre-implementation 88 post-implementation	764
Adult surveys administered	40	17	8 post workshop		65
Adult surveys completed	14	8	8 post workshop	17	47
Interviews/focus groups					
Youth participants	182	44	49	62	337
Adult participants	9	17	18	15	59
Other participants	5 role models	6	Adults at workshops		
Site visits					
Site visits conducted	9	11	13	12	45

Key Findings, Conclusions and Recommendations

I. Teaming Up for Tobacco-Free Kids

Teaming Up for Tobacco-Free Kids (Teaming Up) is a school-based prevention program aimed at students in grades 4, 5, and 6. The goal is to inform students of the health effects of tobacco use and influence decision-making before they form regular tobacco use patterns. The Teaming Up program is made up of four main components: lesson plans for grades 4, 5, and 6, role model visits to Grade 6 classrooms, T-shirts for Grade 6 students, and local and provincial poster contests for Grade 6 students.

Key findings

- Role model visits and curriculum materials increased youth knowledge about the number and type of chemicals in cigarettes, harmful effects of tobacco on the body, and the range of cancers linked to smoking.
- Forty percent of students said they "learned at lot."
- Students discussed what they learned with peers, family members and relatives. More Grade 5 and Grade 6 students discussed what they learned than Grade 4 students.
- Most students (about 80%) said they were not asked to try smoking a cigarette in the past three months. Of those who were offered a cigarette, most refused.
- Most students (76%) said they were never going to smoke.

- The self-reported influence of the program on students' intention not to smoke was highest in Grade 4 (25%).
- For non-experimenters, influence on intention not to smoke increased from Grade 4 to 5 to 6.
- Most students (86%) found tobacco use socially unacceptable and did not like it when someone smoked in their presence.
- At least 40% of students tried to convince someone to quit smoking in the past three months.

Conclusions

Teaming Up increased students' knowledge about the health effects of tobacco use, and influenced their decisions to not smoke or use spit tobacco.

Table 2. Summary of the Intended Program Outcome and an Assessment of the Level of Achievement

Intended Outcome	Level of Achievement		
	Yes	No	Promising*
Grade 4, 5, and 6 students are aware of tobacco use messages	✔		
Grade 4, 5, and 6 students are aware of reasons for staying tobacco-free	✔		
Students express their opinions and attitudes about tobacco use through classroom activities			✔
T-shirts and posters with anti-smoking messages and role model visits influence students to stay smoke-free			✔
Teaming Up project materials and activities assist teachers in delivering tobacco-free messages	✔		

*Promising means the intended outcome was neither achieved nor not achieved, but rather some changes need to be made to achieve the intended outcome.

Contribution to the Alberta Tobacco Reduction Strategy

The evaluators concluded that Teaming Up for Tobacco-Free Kids contributed to the provincial prevention goals of the ATRS in a very positive way.

Recommendations from the evaluation

1. Continue integrating Teaming Up for Tobacco-Free Kids in Alberta schools.
2. Use local people or committees to help organize and coordinate Teaming Up activities with local schools.

3. Improve coordination and communication between the provincial coordinators and TRCs.
4. Coordinate Teaming Up for Tobacco-Free Kids with existing programs and curricula. For example, link Teaming Up directly to the new Alberta Learning health curriculum to demonstrate compatibility in content and objectives as well as Ministry support.
5. Recruit more young people who students can relate to as role models.
6. Consider using role models in grades 4 and 5 as well as Grade 6. Presentations should vary for each grade level.
7. Encourage role models to review their presentations and materials and make the presentations more interactive.
8. Provide opportunities for new role models to meet with experienced role model presenters.
9. Both project implementation and evaluation processes required considerable project coordination and management time on the part of the project manager (AADAC), TRCs, facilitators, and evaluators. These processes should be reviewed and streamlined to make them more efficient.

II. Building Leadership for Action in Schools Today (BLAST)

Building Leadership for Action in Schools Today (BLAST) is a school-based tobacco prevention program for students in grades 7 to 9. The goal is to reduce tobacco use among Alberta youth, empower youth to be leaders, and increase self-esteem. The program educates youth about the harmful effects of tobacco, develops leadership and communication skills among youth, and encourages peer-to-peer action toward tobacco reduction. Youth in the BLAST program participate in a conference that provides guidelines and information to help them plan, develop and implement tobacco-related projects in their schools or communities with the assistance of adult facilitators.

Key findings

- Conference presentations increased youth knowledge about smoking rates in Alberta and Canada, reasons teens smoke, the harmful chemicals in tobacco and its health effects, and ways to reduce tobacco use.
- The conferences assisted youth with project development, especially in developing project goals, keeping the project going,

identifying a target group, and finding the information needed to plan the project.

- The conference was less effective at assisting youth with project implementation, particularly recruitment, planning, fundraising and publicity events, and evaluation.
- All but one youth group said that their project was successful.
- Youth said their projects were successful because they increased awareness about tobacco issues with younger youth (elementary students), parents and others in the community. Recognition for their efforts by their communities as well as government Ministers was also a sign of success for these youth.
- Recruitment and retention of interested schools, adult leaders and students was difficult.
- Adult leaders were not always clear on their roles and responsibilities.
- Project support from adult leaders, TRCs and the Provincial Coordinator was helpful in the project implementation and determined the level of success of a project.
- Time restrictions, meeting times, school and community buy-in, teacher interest in facilitating projects, and student interest in implementing projects affected the development and implementation of the BLAST projects.
- About half the youth said the BLAST project helped them to improve their teamwork skills.
- About 80% of youth said they were empowered by the realization that people working together can influence their communities.
- Youth participation in BLAST projects also influenced participants' self-esteem. About 63% felt more proud of themselves after participating in BLAST and felt the same about other aspects of self-esteem.
- Although youth understood the impact of tobacco use on health, they were less certain regarding the facts about using tobacco to relax, relieve boredom, improve concentration, stay thin, and socialize. This indicates that youth may be influenced by tobacco industry messages that glamorize tobacco use.
- Half the youth had tried smoking. Those that had not had no intention of smoking in the next month. Most youth did not have friends who smoked.

Conclusions

BLAST projects were generally successful and some were very successful. Students gained valuable leadership skills both from the conference and as a result of implementing their projects.

Table 3. Summary of the Intended Program Outcome and an Assessment of the Level of Achievement

Intended Outcome	Level of Achievement		
	Yes	No	Promising*
Conference participants learn current information regarding tobacco	✔		
Conference participants appreciate the value and importance of personal empowerment	✔		
Conference participants learn how to develop and implement an action plan	✔		
Conference participants are motivated - students learn they can make a difference	✔		

*Promising means the intended outcome was neither achieved nor not achieved, but rather some changes need to be made to achieve the intended outcome.

Contribution to the Alberta Tobacco Reduction Strategy

The evaluators concluded that BLAST contributes to the prevention goals of the ATRS.

Recommendations from the evaluation

1. Use the evaluation findings to improve the structure and content of the BLAST conferences.
2. Hold conferences early in the school year so that students have as much time as possible to carry out their projects.
3. TRCs should get schools and other community youth groups to commit to participating in fall BLAST conferences and projects in the previous spring.
4. TRCs and conference facilitators should conduct regular site visits to BLAST projects to monitor progress and provide encouragement and support to BLAST participants.
5. TRCs should get other community members to help implement BLAST projects.
6. Provide incentives for BLAST chaperones to encourage more volunteers.
7. Consider continuing successful BLAST projects to build on the skills and capacities of groups who express interest in sustaining their current activities.
8. Provide opportunities for youth to meet with other youth who participated in BLAST to communicate their experiences and project accomplishments.

9. BLAST appears to be an effective leadership development opportunity for students in junior high school. To enhance the continuum of activity, a BLAST-2 for high school should be considered.

10. Both project implementation and evaluation processes required considerable project coordination and management time of the program coordinator (AADAC), evaluation project manager (AADAC), TRCs (AADAC), facilitators, and evaluators. These processes should be reviewed and streamlined to make them more efficient.

III. Youth Action and Advisory Project (YAAP)

YAAP is a community-based tobacco prevention program for youth (14 to 17 years old). YAAP aims to develop leadership and communication skills among youth to encourage them to take action to help reduce tobacco use. The program goals of YAAP are to reduce tobacco use among Alberta youth, empower youth to be leaders in tobacco reduction, increase self-esteem and prevent youth smoking. YAAP activities include a capacity-building workshop and developing and implementing community-based projects.

Key findings

- Ninety-five percent of workshop participants rated the workshop as very helpful, particularly in increasing their comfort level in starting a project, keeping the project going, speaking with the media, and getting other organizations involved.
- Youth were interested in interacting with other youth from Alberta and sharing ideas about projects and accomplishments.
- YAAP youth regarded their projects as successful because they engaged younger youth in their presentations, family and friends encouraged their activities, and school administrators, adult leaders and TRCs supported their projects.
- It was difficult to recruit, engage and sustain involvement of at-risk youth.
- Recruitment and retention of students to the workshop was difficult. Information about the YAAP program (purpose, scope, expectations for participants) was insufficient and recruitment time was too short.

Conclusions

YAAP has merit as a youth capacity-building program with focused outcomes. However, it is not yet a quality program that appeals to a broad range and number of youth. Program success will depend on a review of program design and delivery.

Table 4. Summary of the Intended Program Outcome and an Assessment of the Level of Achievement

Intended Outcome	Level of Achievement		
	Yes	No	Promising*
Alberta youth have increased capacity to address tobacco reduction initiatives and reduce tobacco use			✔
Youth learn to plan, manage, and implement community-based projects	✔		
Youth develop leadership skills to conduct community-based projects			✔
Youth demonstrate positive attitudes about health and wellness			✔
Youth have increased knowledge and awareness of tobacco issues	✔		
Youth develop skills to plan, initiate, build on and sustain community-based activities and advocacy			✔
Youth are aware of local tobacco issues in the community			✔
Youth develop capacity to work in partnerships (e.g., recruit others to participate, carry out initiatives with other youth and adults)			✔
Youth develop critical thinking skills about tobacco issues			✔
Interested youth participate in AADAC's Youth Advisory Group			✔
Adult mentors help youth evaluate their projects and prepare final reports			✔

*Promising means the intended outcome was neither achieved nor not achieved, but rather some changes need to be made to achieve the intended outcome.

Contribution to the Alberta Tobacco Reduction Strategy

The evaluators concluded that YAAP made a small contribution to the prevention goals of the ATRS. Reach to at-risk youth through YAAP is limited.

Recommendations from the evaluation

1. Consider merging YAAP with BLAST to create a BLAST-2 program for high school students. YAAP is currently offered to youth in grades 9 to 11 and is community-based; BLAST is offered to grade 7 to 9 students and is school-based. Both programs focus on building leadership skills for community-based action. BLAST-2 could build on the skills youth gain in BLAST.

2. Make the YAAP workshops more interactive and increase the opportunities for socializing. Youth require frequent exercise and social breaks. They have lots of ideas and need time to express them and explore them with peers.
3. Place less emphasis on media and more on planning and assessment of project activity.
4. Arrange a wind-up gathering for participants to record their achievements and what they have learned.
5. Encourage participation from a variety of youth from different locations in the province.
6. Create facilitators'/mentors' guides that outline best practices for successful projects and working with youth.
7. Start recruiting students early in the school year. Get permission from school principals even earlier.
8. Expand recruitment beyond schools to existing community groups that may have greater numbers of at-risk youth already involved. Environments other than schools provide different opportunities for at-risk youth to feel they belong.
9. Consult at-risk youth about how to successfully involve them. This group could serve as the Youth Advisory Group.
10. Both project implementation and evaluation processes required considerable project coordination and management time by the program coordinator (AADAC), evaluation project manager (AADAC), TRCs (AADAC), facilitators, and evaluators. These processes should be reviewed and streamlined for increased efficiency.

IV. Kick the Nic

Kick the Nic is a ten-week, group-based tobacco cessation program for 14 to 18-year-old Alberta youth who want to quit smoking. The primary goal of this program is to provide adolescent smokers with an effective tool to examine their tobacco addiction and helpful resources for when they are ready to quit smoking.

Key findings

- There was a high dropout rate for the program. Only 38% (71/187) of Kick the Nic participants completed both pre-and post-implementation surveys.
- The most common reasons youth gave for smoking included relaxation, addiction to nicotine, when drinking alcohol, boredom, out of habit, and because their friends smoke.

- Kick the Nic participants said they wanted to quit because they were concerned about the costs of cigarettes (64%), their health (54%), and they did not want to be controlled by an addiction (52%). Other reasons for wanting to quit included the negative affect that smoking was having on their athletic performance (36%), and also that smoking was affecting their current health (35%).
- The amount smoked at the beginning of the program was a predictor of program completion. Those who completed the program smoked, on average, 19 fewer cigarettes per week than those who did not.
- At the start of the program, youth smoked, on average, 64 cigarettes per week. This number increased on average by 10.6 cigarettes per year of age. Males smoked an average of 17.9 cigarettes more per week than females.
- Seventy-five percent of participants who completed the program (66/88) either quit smoking or cut down. This was about 35% (66/187) of the participants who enrolled in the program.
- Fifty-one percent (45/88) of participants who completed the program reported cutting down on the number of cigarettes they smoked - reducing from an average of 23 cigarettes per week to 9 cigarettes per week.
- About one-quarter (21/88) of Kick the Nic participants reported quitting smoking.
- The most significant barrier to quitting or reducing the number of cigarettes smoked was friends who smoked. This indicates the importance of peer influence in quit attempts.
- Overall, 60% of the program participants found the Kick the Nic program "helpful" or "very helpful."
- Program components that were most helpful to those who quit included the coping strategies, Cope Kit, lesson on understanding why people smoke, and the learning exercises.

Conclusions

Overall, there are indications that Kick the Nic is having a positive impact on youth. Kick the Nic helped youth who participated quit or reduce smoking. It encouraged peer support, which was the most significant influence on success. Kick the Nic reinforced what was learned about the harmful effects of tobacco, and provided strategies and tools to assist the quitting/reducing process.

Table 5. Summary of the Intended Program Outcome and an Assessment of the Level of Achievement

Intended Outcome	Level of Achievement		
	Yes	No	Promising*
Schools are aware that the program is available			✔
Participants attend the program			✔
Participants are educated about the quitting process	✔		
Information is provided to change participants' knowledge and attitude about tobacco	✔		
Participants build coping and stress management skills			✔
Participants are provided with a supportive environment to attempt to quit smoking			✔
Participants build confidence for future quit attempts	✔		
Relationships are built between AADAC and local schools			✔
There is short-term reduced tobacco use among Alberta high school students			✔
Participants have increased confidence in their abilities to quit smoking			✔
Participants have more positive expectations associated with quitting			✔

*Promising means the intended outcome was neither achieved nor not achieved, but rather some changes need to be made to achieve the intended outcome.

Contribution to the Alberta Tobacco Reduction Strategy

The evaluators concluded that Kick the Nic contributes to the cessation and reduction goals of the ATRS. The ability to assess the extent to which this outcome has been achieved, however, is limited by the high drop out rate for the program.

Recommendations from the evaluation

1. AADAC should continue to implement Kick the Nic in Alberta schools.
2. Recruitment efforts should begin as early as possible and should include active recruitment of youth outside schools (e.g., youth groups, places in the community where youth gather).
3. Recruitment methods and success rates should be recorded and reported. This allows links to be made between method of recruitment and success.
4. Track the number of sites that deliver Kick the Nic and the number of participants (including those who did

not complete the program). This will also allow for correlations to be made between results and recruitment.

5. Kick the Nic appears to be more effective for those with less severe tobacco addiction. Other cessation strategies, in combination with Kick the Nic, should be considered for those with more severe addiction.

6. Explore the reasons for the high attrition rate. Follow-up with those who do not complete the program can provide valuable information to improve the program.

7. The evaluation materials developed for the Kick the Nic program should be revised. This includes asking a common set of questions regarding tobacco use at pre-and post-survey, incorporating stages of change, and significantly reducing the complexity and length of the evaluation package.

8. Inform schools of the evaluation results in order to encourage more schools to participate in the program.

9. Use facilitators' and youth suggestions to improve the Kick the Nic program.

10. Both project implementation and evaluation processes required considerable project coordination and management time by the program coordinator (AADAC), evaluation project manager (AADAC), TRCs (AADAC), facilitators, and evaluators. These processes should be reviewed and streamlined for increased efficiency.

11. Further research should be conducted to determine cessation and reduction rates using different levels of intervention (that is, numbers of sessions per week). Appropriate benchmarks and indicators of success need to be developed for different intervention strategies.

12. Conduct follow-up at specified time periods (for example, three, six, nine months) to establish longer-term impact of Kick the Nic.

13. Record relapse rates to contribute to the literature base on the relation between relapse and abstinence.

Future Implications

The results, conclusions and recommendations identified by the Evaluation of the ATRS Tobacco Cessation, Prevention and Protection Programs for Youth have several process and outcome implications for future program planning. The AADAC Tobacco Reduction Unit has reviewed these recommendations and is incorporating them into the four youth tobacco reduction programs. These changes are intended to improve the quality, merit, feasibility, and appropriateness of these programs for youth in Alberta.

INTRODUCTION

In March 2002, Alberta launched the Alberta Tobacco Reduction Strategy (ATRS). The goal of the ATRS is to improve the health of Albertans and decrease health care and social costs through the denormalization of tobacco use. Specifically, the strategy aims to reduce disease, disability, and death related to tobacco use in Alberta by

- reducing the number of young people starting to use tobacco (prevention)
- encouraging and helping tobacco users to quit (reduction)
- reducing non-smokers' exposure to secondhand smoke (cessation)

The Alberta Alcohol and Drug Abuse Commission (AADAC) — an agency of the government of Alberta — was given the role of leading and coordinating the provincial tobacco reduction strategy. AADAC has established 10-year performance targets for the ATRS.

- Reduce the percentage of Albertans 12+ who are current smokers from 28% in 2001/2002 to 18% in 2012/2013.
- Increase the percentage of Albertans age 12+ not regularly exposed to secondhand smoke from 70% in 2001/2002 to 80% in 2012 /2013.

Tobacco Reduction Programs for Youth

In the fall of 2002, AADAC and its partners implemented four provincial youth tobacco cessation, prevention and protection programs.

Table 1: Youth Tobacco Reduction Programs, Target Groups and Strategy Focus

Program	Target	Strategy Focus
Teaming Up for Tobacco-Free Kids	Grades 4, 5, and 6	Prevention
Building Leadership for Action in Schools Today (BLAST)	Grades 7, 8, and 9	Prevention, Protection and Cessation
Youth Action and Advisory Project (YAAP)	Youth aged 14-17	Prevention, Protection and Cessation
Kick the Nic	Youth aged 14-18	Cessation and Protection

These school- and community-based programs are a major component of the ATRS. If successful, they will help the ATRS achieve its performance targets in the next decade by increasing youth knowledge, and changing attitudes and behaviours related to tobacco use in Alberta.

The youth tobacco reduction programs were implemented at the local level (that is, schools and community groups) by 23 AADAC Tobacco Reduction Counsellors (TRCs) throughout Alberta. The TRCs recruited youth, school staff, and community members to the programs and provided support, marketing, and program resources. Provincial Coordinators, liaising with AADAC, oversaw the provincial implementation of the programs and provided support to TRCs and program participants (youth and adult). Programs were located in 30[2] School Districts and 75 communities across Alberta. (See Appendix A)

For more information about the ATRS and these youth programs, please refer to the AADAC website: www.aadac.com.

Program Evaluation

Program evaluation was part of the implementation plan. The evaluation was intended to provide credible evidence to make strategic planning and funding decisions. Evaluation findings will allow AADAC to determine the quality, merit, feasibility, and appropriateness of each program in achieving its individual program-level goals and objectives, and at the provincial level, of achieving the aims of the overall ATRS.

The primary goals of the evaluation from a program level were:

1. To design and implement program evaluations for the four ATRS youth tobacco cessation, prevention, and protection programs.
2. To identify the impacts of these programs on prevention, protection and cessation of tobacco use among participating youth.
3. To make recommendations to AADAC regarding the quality, merit, feasibility, and appropriateness of the programs for Alberta youth.

2 One group was from a school on a First Nations Reserve and therefore fell under federal jurisdiction.

EVALUATION METHODS

In December 2002, Howard Research and Instructional Systems Inc.[3] was contracted by AADAC to conduct an evaluation of the four youth tobacco reduction programs.

Howard Research used process and outcome evaluation methods to evaluate each of the four programs. Process evaluations focused on how well program processes (such as resources and activities) were implemented within schools and community groups. Outcome evaluations assessed the degree to which the individual programs changed youth participant knowledge, attitudes and behaviours. Because individual programs were evaluated, there were no control groups. The TRCs worked with schools and community organizations to determine which schools and community groups had one or more of the four youth tobacco programs. The TRCs then documented and tracked their activities on an Activity Log Sheet prepared by Howard Research. This Activity Log Sheet identified regions in Alberta where the four programs were being implemented.

Consent was obtained from school districts/divisions, schools, parents, and participants to undertake the evaluation. Only school divisions that had implemented at least one of the four programs were contacted.

Table 2. Consent to Evaluation by School Districts/Divisions and Schools

Participant Access	Teaming Up	BLAST	YAAP	Kick the Nic	Total
# of school districts contacted	18	15	2	15	33*
# of school districts consenting	16	14	2	13	31*
# of schools contacted	42	23	2	12	79
# of schools consenting	42	20	1	12	75

* The total is not cumulative because a school district/division could have more than one of the four youth programs occurring within that school district.

Surveys, interviews and focus group sessions were used to gather the evaluation data. Surveys and interview guides were developed by Howard Research and approved by AADAC. One exception was the Kick the Nic evaluation materials, which were used from the British Columbia Kick the Nic program package.

Resources used to develop youth surveys included the Youth Smoking Survey (Statistics Canada, 1993), CCHS (Statistics Canada, 2000), CTUMS (Statistics Canada, 1999), Leadership Skills Inventory (Karnes and Chauvin, 1985), Wilder Collaborations Inventory (Mattessich, Murray-Close, and Monsey, 2001), and Empowerment Scale-Power.

3 Howard Research is an Alberta-based consulting firm specializing in social services research and human services evaluation.

Community Activism, and Optimism (Rogers, Chamberlin, Ellison and Crean, 1997).

Data collection occurred between January and June 2003 and involved the administration of 19 different surveys and 16 different interview guides for the four tobacco programs.

Surveys

The following table identifies the number of surveys administered and responses received for each program.

Table 3. Youth and Adult Surveys Administered and Completed

Surveys	Teaming Up	BLAST	YAAP	Kick the Nic	Total
Youth surveys administered	960	72	75	unknown	unknown
Youth surveys completed	397	27	81	258	763
Adult surveys administered	40	17	8	0	65
Adult surveys completed	14	8	8	17	47

Interviews and Focus Groups

In addition to obtaining data from surveys, the evaluators conducted interviews and focus group sessions to gather additional data about each of the four youth tobacco programs and evaluate outcomes. The evaluators conducted telephone interviews with adult facilitators, in-person or telephone interviews with adults, and in-person interviews and focus groups with youth. Interviews were also conducted with the Provincial Coordinators and AADAC Tobacco Reduction staff. Site visits occurred between January and June 2003.

Table 4. Youth and Adult Interviews, Focus Groups and Site Visits Conducted

Participants	Teaming Up	BLAST	YAAP	Kick the Nic	Total
Youth participants	182	44	49	62	337
Adult participants	9	17	18	15	59
Other participants interviewed	3 role models	3 adult conference attendees; 3 conference presenters	Adults at work shops		
Site Visits	9	11	13	12	45

I. Teaming Up for Tobacco-Free Kids

Program description

Teaming Up for Tobacco-Free Kids (Teaming Up) is a school-based prevention campaign aimed at students in grades 4, 5, and 6. The program was piloted for two years in Edmonton in 2000/2001 and 2001/2002. In 2002/2003, the program was initiated in 129 schools in 27 School Districts across the province.[4]

Teaming Up has four main components.

- Teachers' Resource Kit containing lesson plans for grades 4, 5, and 6
- role model visits to Grade 6 classes
- T-shirts presented to Grade 6 students during role model visits.
- local and provincial poster contests for Grade 6 students

A website (www.tobaccostinks.com) also provides support and further information about the program to facilitators, students, and community members.

Teaming Up has two major goals:

1. Inform students about the health effects of tobacco and provide reasons for staying tobacco-free.
2. Influence decision-making of students before they form regular tobacco use patterns.

An AADAC Tobacco Reduction Consultant liaised with the Provincial Coordinator to oversee the program implementation. Teaming Up for Tobacco-Free Kids was implemented in schools by teachers, counsellors, school administrators, TRCs, health nurses, Family and School Wellness representatives, and others. At the school level, teachers typically delivered the curriculum with support from the local AADAC Tobacco Reduction Counsellor (TRC). In some regions, community committees assisted with program organization and implementation. Role models were also invited into classrooms to deliver messages about tobacco use and its effects. Role models were volunteers, such as athletes from colleges and universities, nursing students, members of sports teams, and high school students.

4 Although TRCs reported these numbers, they were unsure of the exact number of Teaming Up for Tobacco-Free Kids programs implemented.

Data collection

There were 960 surveys sent to schools participating in the Teaming Up for Tobacco-Free Kids program. Of these, 397 surveys were returned — a response rate of about 41%. There were 38 students from Grade 4, 87 from Grade 5, and 272 from Grade 6. The respondents were an even split of boys and girls. In addition, 40 facilitator surveys were sent out, with 14 responses; a response rate of 35%. The survey information was supplemented by focus groups with 182 youth participating, as well as nine facilitator and five role model interviews.

Key findings and impacts

Knowledge gained from Teaming Up

Curriculum materials

One of the goals of Teaming Up is to influence student thinking and inform them of the health effects of tobacco. The program had a positive impact in achieving this goal.

The use of Teaming Up resources by facilitators in Grade 6 was related to increases in student knowledge about tobacco use. Interestingly, in Grade 6, where more resources were used, this had an unintended effect of reducing discussion between participants and their friends about the use and effects of tobacco. This suggests that those provided with more information in a classroom setting felt less need to discuss these issues outside the classroom.

Grade 6 students reported learning less from the program than those in grades 4 and 5. However, approximately 40% of students in all grades reported learning "a lot" from the program.

The most memorable lessons learned from the Teaming Up program were the number of harmful chemicals in cigarettes, the negative effects of smoking and the range of cancers linked to smoking. Grade 6 students, in particular, had vivid recollections of the harmful chemicals in cigarettes. The realization of potential harm, and connection to real life experience of knowing someone who has died from cancer, reinforced to students that smoking is harmful to their health and well being. Students then relayed this message to peers, family and relatives.

Role model visits

Role models further reinforced the harmful effects of tobacco use. These visits had a very positive impact on students. Most students remembered the names of chemicals contained in cigarettes and the harmful effects of tobacco on the body. Weeks after the presentation, they had little trouble remembering that tar, nicotine, window cleaner, rat poison, formaldehyde, antifreeze, paint thinner, and thousands of other chemicals were part of a cigarette. Students also remembered the "gory" posters that illustrated the harmful effects of tobacco

"It's like saying someone lots of money to commit suicide."
Student

"Seems like tobacco companies are trying to kill you."
Student

"It was nice to see that they were boys. We don't have many here and we only have two male teachers. Seeing the football sweatshirt really got them attention. They were well spoken and did a good job. Some kids are hesitating as to whether they will smoke or not. I think this will make them think, but it all depends on with [sic] they hang around."
Teacher

on various parts of the body. In addition, students were surprised at the range of different cancers that tobacco use can cause.

Students liked having young people talk to them about tobacco issues. They liked that some of the young people were on sports teams at a university or college. Students felt that presenters who were ex-smokers were even more credible messengers about the harmful effects of tobacco and how important it was not to start smoking. Teacher facilitators reiterated the feedback provided by students regarding the role models. They appreciated having the role models visit their students. They felt that having presenters closer in age to the students would have a greater effect on the students.

Student behaviour in relation to tobacco use

Another goal of Teaming Up is to influence youth decision-making regarding staying smoke-free before they form regular tobacco use patterns.

Student experiences with tobacco

Very few students in grades 4, 5 and 6 admitted to being smokers. Most students (80%) were not asked to try a cigarette in the past three months. Of those who were offered a cigarette, most refused.

Intention to smoke

Most students (76%) reported that they were not going to smoke. Students who reported that they were not influenced by the program because they had never intended to try tobacco from the outset increased from Grade 4 to Grade 5 and again from Grade 5 to Grade 6. The self-reported influence of the program on students' intention not to smoke is highest in Grade 4 (25%). Most Grade 6 students were adamant that they would not smoke.

The influence the program has on intention not to smoke is important. The literature indicates that the intention to smoke is the best predictor of smoking at both Grade 7 and Grade 9 (Eckhart, Woodruff, & Elder, 1994) and that early smokers are at least three times as likely to become regular tobacco users by Grade 12 (Ellickson, Tucker, & Klein, 2001).

Attitudes and beliefs about tobacco

Students in grades 4, 5, and 6 do not appear to find tobacco products socially acceptable (86%). Specifically, they did not like it when someone smoked in their presence. This attitude is another deterrent to starting to smoke.

Motivation to action

Students discussed the information they learned from the curriculum materials and/or role model visits with peers, families and relatives. Half the students in Grade 4 discussed tobacco issues with family

members; this proportion increased in Grade 5 and again in Grade 6. Approximately 25% of students in Grade 4 discussed tobacco with friends; over half of students in Grade 5 and Grade 6 discussed tobacco with friends.

In addition, at least 40% of students in each grade had tried to convince someone to quit smoking in the past three months. While they said they would encourage their friends and families not to smoke, they acknowledged that kids, teens especially, would smoke if they wanted to.

Challenges/barriers in program implementation

Although there were many indications that Teaming Up is successful, there were some suggestions for improvement.

Recruiting, scheduling, and organizing role model visits was often challenging. In some cases presenters were not always well prepared. Role models suggested that they needed greater clarification on the expectations of what their role entailed, examples to guide them, and more visual aids to use in their presentations.

In addition, a common reason identified by schools for not participating in Teaming Up was a lack of time as well as an increased burden on schools that are already running other tobacco-related programs.

Conclusions

Teaming Up is successful in informing students about the health effects of tobacco and influences their decisions not to smoke or use spit tobacco.

Table 5. Summary of the Intended Program Outcome and an Assessment of the Level of Achievement

Intended Outcome	Level of Achievement		
	Yes	No	Promising*
Grade 4, 5, and 6 students are aware of tobacco use messages	✔		
Grade 4, 5, and 6 students are aware of reasons for staying tobacco-free	✔		
Students express their opinions and attitudes about tobacco use through classroom activities			✔
T-shirts and posters with anti-smoking messages and role model visits influence students to stay smoke-free			✔
Teaming Up project materials and activities assist teachers in delivering tobacco free messages	✔		

*Promising means the intended outcome was neither achieved nor not achieved, but rather some changes need to be made to achieve the intended outcome.

Contributions to the Alberta Tobacco Reduction Strategy

Evaluators concluded that Teaming Up for Tobacco-Free Kids contributed to the provincial prevention goals of the ATRS in a very positive way.

Recommendations from the evaluation

1. Continue integrating Teaming Up for Tobacco-Free Kids into the Alberta school curriculum.
2. Use local people or committees to help organize and coordinate Teaming Up activities with local schools.
3. Improve coordination and communication between the provincial level and Tobacco Reduction Counsellors to facilitate smooth implementation in schools.
4. Coordinate the Teaming Up for Tobacco-Free Kids program with existing programs and curricula. For example, link Teaming Up directly to the new Alberta Learning health curriculum to demonstrate compatibility in content and objectives as well as Ministry support.
5. Recruit more young people who students can relate to as role models.
6. Consider using role models in grades 4 and 5 as well as Grade 6. Presentations should vary for each grade level.
7. Encourage role models to review their presentations and materials and make the presentations more interactive.
8. Provide opportunities for new role models to meet with experienced role model presenters.
9. Both project implementation and evaluation processes required considerable project coordination and management time on the part of the program consultant (AADAC), project manager (AADAC), TRCs (AADAC), facilitators, and evaluators. These processes should be reviewed and streamlined to make them more efficient.

II. Building Leadership for Action in Schools Today (BLAST)

Program description

Building Leadership for Action in Schools Today (BLAST) is a school-based tobacco prevention program for students in grades 7 to 9. The program educates youth about the harmful effects of tobacco and develops leadership and communication skills among

youth. The program encourages peer-to-peer action toward tobacco reduction.

The Alberta Lung Association (ALA) developed BLAST in 1996. The program is currently funded and administered by AADAC. AADAC and a Provincial Coordinator assist Tobacco Reduction Counsellors (TRCs) implement BLAST throughout Alberta. Adult leaders assist youth in developing and implementing BLAST projects in schools and communities. Adult leaders may be teachers, parents, counsellors, AADAC TRCs, public health nurses, and others.

BLAST has two major goals.

1. Reduce tobacco use among Alberta youth age 15 to 17.
2. Enhance youth empowerment and self-esteem.

The BLAST program is made up of the following key activities.

- three weekend student leadership conferences (northern, central, and southern Alberta)
- a tobacco-related school and community project
- project evaluations
- prizes awarded by AADAC

In the fall of 2002, 93 youth participated in one of the three Student Leadership Conferences held in northern, central and southern Alberta (four youth were invited from each participating school). The purpose of the conference was to provide information to youth about tobacco, and help them learn the skills required to plan, implement and evaluate their BLAST projects.

A total of 25 BLAST youth groups implemented projects in 22 different communities across the province during the 2002/2003 school term. (There were two BLAST groups each in Peace River, Edmonton and Calgary.) Beyond the conference participants only a few other youth were recruited to help implement BLAST projects at the community level.

Data collection

Seventy-two youth from across Alberta followed up conference participation and participated in the BLAST program. In total, 27 youth completed BLAST surveys — a response rate of about 38%. In addition, 17 adult leaders participated in the program. Eight responded to surveys — a 47% response rate. To supplement this information, 44 youth participated in focus group discussions and 17 adults, three adult conference attendees and three conference presenters were interviewed.

Key findings and impacts

Influence of the conference on youth knowledge and awareness about tobacco issues

Overall, the conference was effective in increasing knowledge levels among youth conference participants. While most conference attendees were in grades 8 and 9, the greatest improvement was reported for students in Grade 7.

BLAST project youth leaders and facilitators were asked to assess the level to which the BLAST conference helped to increase their knowledge in the following areas.

- youth smoking
- reasons teens smoke
- how many people in Alberta/Canada smoke
- harmful chemicals in tobacco
- secondhand smoke
- smoking-related problems and diseases
- spit tobacco
- ways to reduce tobacco use

Most youth leaders (n=24) and facilitators (n=17) reported that the conference helped youth to better understand tobacco issues, in particular, the harmful compounds in tobacco, the dangers of secondhand smoke, the dangers of chewing and snuff tobacco, and prevalence of tobacco use in Canada.

Youth leaders generally found the conference interesting but said that the information was not always new to them. They most readily recalled the chemical content of cigarettes and the models of the lungs and tongue. They recalled that the conference focused on chemical content of tobacco, reasons youth smoke, what effects tobacco had on the body, secondhand smoke and spit tobacco. These youth also found that less information was provided on ways to reduce tobacco use (e.g., laws, taxes, and youth programs). In addition, they found the videos and Powerpoint presentations particularly helpful, and they liked the games.

Facilitators reported that the conference was not effective in helping youth understand why youth start to smoke and continue smoking, or offering strategies to reduce tobacco use. In addition, facilitators expressed concern about the legal liability issues relating to transporting students to conferences. They were somewhat concerned about the isolated locations of the conferences, and the length of time away from home (three days).

Effectiveness of conference in assisting youth to develop and implement a project

Survey results indicated that most youth leaders who attended a BLAST conference felt that the conference helped them carry out their projects, especially developing project goals, keeping the project going, identifying a target group, and finding the information needed to plan the project.

Some youth felt the conference gave them lots of information to plan their projects and appreciated the binder and list of websites for their reference. Others felt ill prepared to plan, implement and evaluate projects when they got home. Once home, youth identified the BLAST facilitator, school principal, AADAC and public health nurse as providing the most help to them. They also said that being passionate about tobacco issues was a big help. Thus, motivation to be involved and participate in the development and implementation of a tobacco-related project was important.

Chaperones felt that too few strategies were provided to students about how to recruit other youth to their activities and how to assess their work at its completion. Facilitators who attended a BLAST conference agreed. They generally felt that the BLAST conference helped youth with conducting project activities but did not help, or helped very little, with

- recruitment
- planning fundraising activities
- planning publicity events
- developing project evaluation

Impact of BLAST projects

Success of BLAST projects

All but one youth group said their projects had been successful. Project activities included presentations to elementary students, assessment of students' knowledge about tobacco, fundraisers, poster contests and a dance with a DJ.

Some youth leaders felt that posters displayed around the school and at other community events held at the school helped parents increase their awareness of tobacco issues.

Youth leaders felt they had the most impact on elementary students and least influence on high school students. Youth reported that their organizational skills improved and they became more comfortable speaking in public. Responses to letters sent to Barb Tarbox and government Ministers showed that their efforts were being recognized beyond their local communities.

BLAST project facilitators indicated they also felt that youth projects had been successful, particularly plays presented to younger students. One group created a "Butts Out" area where students from two schools could meet to enjoy a smoke-free lunch. Facilitators said that guest speakers, corporate support, regular team meetings, and group energy contributed to the project success.

Ability to work in teams

Youth were asked to rate how their BLAST group functioned as a team. They felt that their teams clearly understood the purpose of the group, and successfully set goals (range 68% to 92%). The weakest area of BLAST teams appeared to be having enough people to carry out the project. About 22% of youth felt they did not have enough group members to do what they wanted.

About half of the youth felt that they had personally improved in many aspects related to working on teams, specifically being aware of the effect of their decisions on others, making decisions quickly and accurately based on facts, accepting advice from others, and keeping the group's best interests in mind.

BLAST also demonstrated the importance of peer involvement. Several BLAST groups were familiar with one another prior to BLAST activity. Research indicates that peer influence has been demonstrated as a positive reinforcement for youth to stay smoke-free (Wiborg, et al., 2002).

Current BLAST activity reinforces strategies that involve student interaction. The literature identifies that interactive strategies are more effective than non-interactive strategies at reinforcing anti-tobacco attitudes and curbing youth smoking (Wenter, et al., 2002).

Empowerment

Respondents were asked to rate how BLAST had an impact on their feelings of empowerment. Most respondents (81%) felt that BLAST strongly helped them to realize that people working together can influence their communities. BLAST had less of an impact on youths' feelings that they could determine what happens in their lives, with about 30% reporting that BLAST had no influence on their feelings of empowerment.

Self-esteem

BLAST youth were asked a number of questions about their self-esteem. Most youth (63%) felt prouder of themselves after participation in BLAST. Most felt about the same for other aspects of self-esteem, such as liking who they are, believing that they are doing something well, liking the way they look.

Healthy behaviours

Most respondents had not changed their participation in various activities, although some had increased their participation in other activities "a little" or "much more."

Barriers/challenges to project implementation

According to TRCs, barriers to implementation included short timelines for recruitment, lack of interest from teachers to be facilitators, and lack of interest from youth.

Difficulties that facilitators identified were time restrictions, youth not cooperating, and lack of school buy-in. Rural students meeting after school was also challenging due to having to make special transportation arrangements.

Youth identified not having enough project members to complete their projects in the way they had hoped. In some instances, youth and facilitators did not realize that they were expected to undertake a BLAST project once returning to their community from the BLAST conference.

Smoking behaviour

Attitudes and beliefs about smoking

Results indicate that youth understand the impact of tobacco use on health. They were less certain about the facts about using tobacco to relax, relieve boredom, improve concentration, stay thin, and socialize. This indicates that youth may be influenced by tobacco industry messages that glamorize tobacco use.

Youth provided mixed responses in relation to the difficulty in obtaining cigarettes, with 33% saying it is easy to obtain cigarettes, and 33% saying it's difficult.

Intention not to smoke

Over half of the BLAST youth had tried cigarettes (13/24). Most who had already tried smoking had no intention of trying smoking in the next month. Of those who had not tried smoking, none had any intention of trying smoking in the next month.

On average, youth indicated having about seven close friends. Most youth (67%) had no friends who smoked. Of the nine participants who had close friends who smoked, seven tried to convince a close friend to stop smoking during the past three months. Almost all youth (92%) said they had no intention of smoking one year from the time of completing the survey.

Conclusions

The BLAST program educates youth about the harmful effects of tobacco and develops leadership and communication skills among youth. The program encourages peer-to-peer action toward tobacco reduction. BLAST projects were generally successful; some were very successful. Students gained valuable leadership skills both from the conference and as a result of implementing their projects.

Table 6. Summary of the Intended Program Outcome and an Assessment of the Level of Achievement

Intended Outcome	Level of Achievement		
	Yes	No	Promising*
Conference participants learn current information regarding tobacco	✔		
Conference participants appreciate the value and importance of personal empowerment	✔		
Conference participants learn how to develop and implement an action plan	✔		
Conference participants are motivated - students learn they can make a difference	✔		

*Promising means the intended outcome was neither achieved nor not achieved, but rather some changes need to be made to achieve the intended outcome.

Contributions to the Alberta Tobacco Reduction Strategy

The evaluators concluded that BLAST contributes to the prevention goals of the Alberta Tobacco Reduction Strategy.

Recommendations from the evaluation

1. Continue to refine the BLAST conferences. Use evaluation findings to improve the conference structure and content.
2. Ensure that conferences are held early in the school year so that projects have as much time as possible for implementation.
3. TRCs need to make schools and other community youth groups aware of BLAST in the spring of each year for commitment for early fall activity.
4. TRCs and conference facilitators should conduct regular site visits to BLAST projects to monitor progress and provide encouragement and support to BLAST participants.
5. TRCs should enlist the assistance of other community members to help implement BLAST projects.

6. Provide incentives for BLAST chaperones to encourage volunteers to dedicate a weekend of their time with youth in an isolated location.

7. Consider continuing successful BLAST projects to build on the skills and capacities of groups who express interest in sustaining their current activities.

8. Provide opportunities (such as a conferences) for youth to meet with other youth who participated in BLAST to communicate their experiences and project accomplishments.

9. BLAST appears to be an effective leadership development opportunity for students in junior high school. To enhance the continuum of activity, a BLAST-2 for high school students should be considered.

10. Both project implementation and evaluation required considerable project coordination and management time on the part of the program coordinator (AADAC), evaluation project manager (AADAC), TRCs (AADAC), facilitators, and evaluators. These processes should be reviewed and streamlined to make them more efficient.

III. Youth Action and Advisory Project (YAAP)

Program description

YAAP is a community-based tobacco prevention program for youth ages 14 to 17. The intent of the program is to develop leadership and communication skills among youth and encourage them to take action to help reduce tobacco use. The YAAP program goals include reducing tobacco use among Alberta youth, empowering youth to be leaders, building self-esteem, and preventing youth from smoking.

The program has the following key activities.

- capacity-building workshops for YAAP youth
- community-based tobacco-related projects
- participation in Youth Advisory Group

Youth became involved mainly because they did not like smoking, or because they were trying to make a difference. A total of 16 YAAP groups formed across the province in 14 different communities (15 different school districts) involving approximately 75 youth between the ages of 12 and 18 (most between ages 13 and 16). While YAAP was intended to involve "at-risk" youth, several YAAP participants were mainstream junior and senior high students.

YAAP projects were implemented in youth drop-in centres, Boys and Girls Clubs, schools, outreach schools, friendship centres, as well as through a Youth Addictions Awareness Committee, and community youth councils.

Adult leaders assisted youth to develop and implement YAAP programs in communities. Leaders were teachers, counsellors, AADAC Tobacco Reduction Counsellors (TRCs), health nurses, and others interested in delivering the program.

Data collection

A total of 21 youth and 8 adult leaders attended one of two YAAP workshops. All participants were surveyed at the time of the workshop (both before and after the workshop). In addition, at the start of implementing their YAAP projects, 52 out of 75 youth completed a pre-implementation survey; a response rate of 69%. Towards the end of their projects youth were also asked to send a survey to complete the evaluation but only nine responded.

To obtain additional information, the evaluators conducted site visits of YAAP projects across Alberta between March and June 2003. The evaluators visited 11 sites at the beginning of project implementation (39 youth participated in focus group sessions and 13 adult leaders were interviewed) and two sites were visited again at the end of the project (10 youth participated in focus group sessions and 4 adult leaders were interviewed).

Since only six youth completed both pre-and post-implementation surveys, it is impossible to assess changes in behaviour resulting from YAAP. Much of the assessment of outcomes for YAAP is based on perceptual data, that is, recollections and articulation of experiences and views of youth and facilitators involved in YAAP. These data are no less important than quantitative pre-post data and are equally relevant in assessing intended outcomes identified below. However, their predictive value is limited.

Key findings and impacts

Influence of the workshop on youth knowledge and awareness of tobacco issues

Perceptual data collected from youth at focus group sessions indicated that most youth felt that they had not learned a lot more about tobacco than they already knew. Some youth said they learned about the harmful effects of tobacco use.

Effectiveness of the workshop in assisting youth to develop and implement a project

Post-workshop survey results indicated that 95% of youth rated the workshop as very helpful. YAAP increased youth comfort level in starting a project, keeping it going, speaking with the media, and getting other organizations involved.

Learning how to work in a group and initiate and run a project was important to the youth. Participants developed skills to help them brainstorm, get started, plan and make timelines, develop partners, assign roles, and follow through. They also said the exercises on how to conduct an interview were interesting.

Youth found the Tobacco Basics Handbook to be a good resource. They liked the social aspect of the workshop best, and enjoyed having time to meet and talk with other youth. At post-implementation focus groups, workshop participants suggested that more interaction, shorter surveys, and more opportunity to meet other youth would have improved the workshop.

YAAP participants learned skills in presentation. They learned that they can gain the attention of younger students and that students of any age will be attracted to straightforward bulletin board messages and contests. Some reported increased skill in working in a group, although it was clear among some groups that YAAP participants knew each other well prior to participating in the YAAP program. Familiarity among group members seemed to speed the implementation process.

Impact of YAAP projects

Low post-implementation survey response rates make a generalized assessment of outcomes impossible. Impact, then, was assessed on attitudes and behaviours towards tobacco use at project initiation, and on what YAAP participants thought they had achieved through their activities.

Youth said they and their project facilitators shared decision-making. However, according to the facilitators, most youth required some support in increasing their decision-making ability and self-esteem.

Some YAAP groups believed they made an impact because they were closer to the students' ages and felt that students were listening to their messages. In their view, tobacco is everybody's issue. They felt that students going into junior high and high school were better informed about tobacco use and issues than students currently in high school.

Success of YAAP projects

YAAP youth saw engaging younger students in presentations as a sign of success. Other students stopping in hallways to read YAAP posters also demonstrated to YAAP youth that their messages were getting

"These girls are self-starters and are focused. They are disciplined and part of a tight group already. If that hadn't been the case, this project would have required considerably more work in the beginning to create a project and make it happen."
– *YAAP leader*

attention. Family and friends offered encouragement for their activities which included recording a CD, making a video, making presentations to elementary school students, City Council, and Chambers of Commerce. Some groups made water bottles, constructed a web page, sponsored contests, or participated in World No Tobacco Day activities. One group painted large bulletin boards (one geared for adults, another for students).

Supportive school administrators were helpful, as were teachers and mentors, friends and family. Youth felt that their projects started too late. More time, more money, more people and more meetings were required.

YAAP facilitators felt that some projects had been very successful. They commented on the large number of poster entries that had been received, and the enthusiasm and independence of one group of four junior high girls in particular, and a group who scripted and performed a play for over 100 students.

While facilitators regarded recruiting others into YAAP projects as minimal, they believed that good partnerships were being formed (e.g., with local pharmacies, schools and media). Because of workload issues, facilitators suggested that having co-mentors was a good idea.

Challenges/barriers to implementing YAAP

Adult facilitators felt that more time could have been allotted to working in groups and role-playing an interview with the media. Facilitators suggested:

1. Holding YAAP workshops when they do not conflict with other events.
2. Securing school support.
3. Ensuring that a variety of youth from across the province attend the workshops.
4. Creating opportunities for youth to meet and exchange ideas at workshops.

Barriers included the short time frame for implementation, scheduling conflicts for students, difficulty getting youth to attend the workshops, and lack of information about the program.

Smoking behaviour

Attitudes and beliefs about smoking

Youth generally thought smoking was addictive and harmful to health. However, almost one quarter of youth believed that smoking helps people stay slim, and almost 60% believed that smoking helps people

to relax. Almost 35% believed that smoking gave people a reason to socialize.

YAAP participants were generally active in their communities. They scored high on all aspects of team functioning on pre-program assessments. Decision-making ability and self-esteem were indicated as areas for improvement.

Youth experiences with tobacco

YAAP youth who completed pre-implementation surveys were between the ages of 12 and 18. YAAP participants at project initiation reported the following tobacco use behaviours.

- Almost half (46%) had tried smoking.
- Of those who had tried cigarettes, 34% had tried at least one cigarette.
- Forty-four percent thought it was easy to get cigarettes.
- Of those who had never smoked (n=27), over 85% had never seriously thought about trying.
- Those who had smoked tried their first cigarette between ages 6 and 15.
- Of those who smoked one or more cigarettes, eight had smoked fewer than 100 and two had smoked more than 100.
- Of those who had smoked at least one cigarette, half had smoked every day for one week.
- Most respondents who had smoked more than one cigarette had not smoked in the 30 days prior to completing the survey.
- Over half of respondents reported that at least one person, excluding themselves, smoked inside their homes.
- Fifty-seven percent of YAAP respondents had no friends who smoked.

Intention not to smoke

About 73% of youth said they did not think they would be smoking one year from the time they completed the survey.

Conclusions

YAAP has merit as a youth capacity-building program and has focused outcomes. However, it is not yet a quality program that appeals to a broad range and number of youth. Evaluators recommend reviewing the program design and delivery and making those changes necessary to make YAAP a success.

Table 7. Summary of the Intended Program Outcome and an Assessment of the Level of Achievement

Intended Outcome	Level of Achievement		
	Yes	No	Promising*
Alberta youth have increased capacity to address tobacco reduction initiatives and reduce tobacco use			✔
Youth learn to plan, manage, and implement community-based projects	✔		
Youth develop leadership skills to conduct community-based projects			✔
Youth demonstrate positive attitudes about health and wellness			✔
Youth have increased knowledge and awareness of tobacco issues	✔		
Youth develop skills to plan, initiate, build on and sustain community-based activities and advocacy			✔
Youth are aware of local tobacco issues in the community			✔
Youth develop capacity to work in partnerships (e.g., recruit others to participate, carry out initiatives with other youth and adults)			✔
Youth develop critical thinking skills about tobacco issues			✔
Interested youth participate in AADAC's Youth Advisory Group			✔
Adult mentors help youth evaluate their projects and prepare final reports.			✔

*Promising means the intended outcome was neither achieved nor not achieved, but rather some changes need to be made to achieve the intended outcome.

Contributions to the Alberta Tobacco Reduction Strategy

The evaluators concluded that YAAP made a small contribution to the prevention goals of the ATRS. Reach to at-risk youth through YAAP is limited.

Recommendations from the evaluation

1. Merge YAAP with BLAST to create a BLAST-2 program specifically targeting high school students. Both programs focus on building leadership skills for community-based action. Significant resources and support from AADAC and partnership with schools will be required.

   BLAST processes may transfer well. YAAP is complementary to BLAST. While YAAP is offered to an older age group (grade 9-11)

and is community-based, BLAST is offered to a younger age group (grade 7-9) and is school-based. One BLAST mentor commented that after Grade 9, there is little opportunity for BLAST youth to further their skills and experiences. Youth who had participated in BLAST may be a possible source of participants for YAAP.

2. Make the YAAP workshops more interactive and increase the opportunities for socializing. Youth require frequent exercise and social breaks. They have lots of ideas and need time to express them and explore them with peers.
3. Place less emphasis on media and more on the projects.
4. Arrange a wind-up gathering so YAAP participants can report their achievements and what they have learned.
5. Encourage participation of a variety of youth from different locations in the province.
6. Create facilitators'/mentors' guides that outline best practices for successful projects and working with youth.
7. Start recruiting students early in the school year. Get permission from school principals the previous spring.
8. Expand recruitment beyond schools to community groups that may have greater numbers of at-risk youth already involved. Environments other than schools provide different opportunities for at-risk youth to feel they belong.
9. Consult at-risk youth about how to successfully involve them in designing and delivering tobacco reduction strategies that will build knowledge, change attitudes and raise awareness. This group could serve as the Youth Advisory Group.
10. Both project implementation and evaluation processes required considerable project coordination and management time on the part of the program coordinator (AADAC), evaluation project manager (AADAC), TRCs (AADAC), facilitators, and evaluators. These processes should be reviewed and streamlined for increased efficiency.

IV. Kick the Nic

Program description

Kick the Nic is a ten-week tobacco cessation group program for youth (age 14 to 18) who want to quit smoking. Kick the Nic program goals include

- helping adolescent smokers examine their tobacco addictions

- providing helpful resources to adolescent smokers when they are ready to quit smoking
- reducing tobacco use among Alberta youth (age 14 to 18)
- increasing youth capacity to quit or decrease use of tobacco products

Sessions are based on the Stages of Change and on Social Cognitive Theory. Kick the Nic was originally developed and implemented by the British Columbia Ministry of Health and was adapted by AADAC for Alberta youth. The program focuses on increasing youth knowledge, changing attitudes about tobacco, and developing skills that can be used to quit smoking.

Kick the Nic was delivered in schools and community settings. Facilitators included teachers, parents, counsellors, AADAC Tobacco Reduction Counsellors (TRCs), health nurses, Family and School Wellness representatives, and others. Facilitators were trained to deliver the program by AADAC Tobacco Reduction Counsellors.

During the 2002/2003 school year, Kick the Nic was implemented in at least 72 schools and organizations in 27 School Districts/Divisions and 30 communities across Alberta.[5] Twenty-three AADAC Tobacco Reduction Counsellors (TRCs) provide support, marketing, and resources for the program. An AADAC Tobacco Reduction Consultant and Manager, AADAC Tobacco Reduction Programs, oversaw program implementation.

Data collection

A total of 187 youth attended some or all of the 10 Kick the Nic sessions. Youth participants completed a survey at the beginning and end of the program. There were 170 pre-implementation and 88 post-implementation surveys completed. Only 71 of 187 (38%) Kick the Nic participants completed both pre-and post-implementation surveys. This high drop-out rate reduced the ability to make generalizations based on the evaluation results.

In addition, facilitators were asked to complete a Facilitator Survey at the end of the program, as well as complete session surveys at the end of each session. A total of 17 facilitators completed these surveys.

To supplement the data gathered from these surveys, 62 youth participated in focus groups at the end of their Kick the Nic program and 15 facilitators were interviewed in person.

5 Although TRCs reported these numbers, they were unsure of the exact number of Kick the Nic programs implemented. Therefore, the evaluators were unable to estimate the number of youth province-wide who participated in Kick the Nic.

Key findings and impacts

Predictors of program completion

Kick the Nic had a high drop-out rate. Age and gender did not predict completion of the post-implementation, but the amount smoked at pre-implementation did. Those who completed the post-implementation survey smoked, on average, almost 19 fewer cigarettes per week than those who did not complete a post-implementation survey. Youth who smoked more tended not to complete the program.

Those who completed both surveys reported more successful previous attempts than those who had completed only the first survey. This provides additional support for assuming that those who were more successful in completing Kick the Nic were less addicted than those who had not completed the program.

Youth smoking behaviours

At initiation

Before starting the Kick the Nic program:

- Youth smoked an average of 64 cigarettes per week.
- The amount smoked increased, on average, 10.6 cigarettes per week per year of age.
- Males smoked an average of 17.9 cigarettes more per week than females.
- On average, youth smokers had their first cigarette within one hour of waking.
- Half reported that they smoked in their own homes.
- Eighty-four percent of youth reported that most or all of their friends smoked.
- The more a youth smoked, the fewer times they had attempted to quit.

Reasons for smoking

- The most common reasons youth reported for smoking were relaxation, addiction to nicotine, when drinking alcohol, boredom, out of habit, and because friends smoke.
- Three reasons for smoking increased significantly with age: when drinking, boredom, and out of habit.
- Smoking out of habit increased with the number of cigarettes smoked.
- Smoking because their friends smoke was important when participants smoked few cigarettes, but less important as the number of cigarettes smoked increased.

"I don't like smoking. I've been smoking since I was ten. I wanted to quit. This just pushed me."
– *Kick the Nic participant*

"It was time to quit and this was a good way to get me out of smoking a bad one."
– *Kick the Nic participant*

"My cough is getting bad and I can't run. My basement smells like smoke. It costs a lot of money."
– *Kick the Nic participant*

Reasons to quit

Kick the Nic participants reported that they want to quit for the following reasons

- worried about their health
- concerned about the cost of cigarettes
- not wanting to be controlled by an addiction
- affecting current health
- affecting athletic performance

Other observations on reasons given for wanting to quit

- More females than males reported wanting to quit because of pressure from their parents.
- More males reported wanting to quit because it affected current health, and because they knew someone who had died from smoking.
- Cost of cigarettes and effect on current health became increasingly important with age.
- Restrictions on smoking in public places became less important with age.
- Cost became very important when participants smoked more than 50 cigarettes per week.
- Disliking the taste or smell of cigarettes became decreasingly important the more a participant smoked.
- All of these results were statistically significant.

Motivation for joining Kick the Nic

The following were most often cited by youth as reasons for joining Kick the Nic.

- to quit smoking
- to cut down
- to learn strategies to help them stop smoking or cut down
- to support others to help them quit or cut down
- to save money.

Other reasons youth gave for joining the program included the following.

- Barb Tarbox presentation
- Kick the Nic was offered at school
- help staying smoke-free
- become more physically fit

- get out of class
- friends did
- to socialize
- nothing else to do
- see if Kick the Nic would work
- family member died from lung cancer

For most youth the desire to quit smoking, or to learn strategies that would help them quit, led them to joining Kick the Nic. Having the support of peers or lending support to peers in the reduction/cessation process was an important aspect of the program. Opportunities for socialization were also reported. The fact that Kick the Nic was offered at school (usually during school hours) also served as an incentive.

The majority of Kick the Nic participants joined voluntarily, learning about the program through presentations made in their school by either an AADAC Tobacco Reduction Counsellor, or a representative of the regional health authority. Some youth responded to posters in hallways, ads in the school newspaper, or word of mouth from friends or teachers.

Expectations of Kick the Nic

The majority of youth participants (73%) expected some or a great deal of encouragement from their families to help them quit or reduce smoking. The older a respondent was, the more support the participant expected from family members.

Youth were asked what they expected to get from participating in Kick the Nic. Most commonly they expected to learn strategies on how to quit. In addition, they also expected to get tips on how to deal with cravings, tips on how to cope with stress, support from peers also trying to quit, support from experts on how to quit, a place to talk about how hard it is to quit, and access to nicotine replacement. Older participants were more likely to expect support from experts on how to quit.

Youth smoking behavior - post-implementation survey

- Seventy-five percent (66/88) of participants who completed the program either quit smoking or cut down. This is about 35% of the participants who enrolled in the program.
- Fifty-one percent (45/88) reported cutting down (reducing from an average of 23 cigarettes per week to 9 cigarettes per week). This difference is statistically significant.

Small successes were acknowledged and considered significant. For example, reducing from 16 cigarettes per day to 7 was celebrated.

Table 8. Examples of the Amount of Reductions in Tobacco Consumption made by Students

Amount of Tobacco Used Pre Kick the Nic	Amount of Tobacco Used Post Kick the Nic
1-2 packs / day	half pack / day
1 pack / day	4-5 cigarettes / day
1 pack / day	half pack / day
3 cans chew / week	1 can every 2 weeks

Quitting smoking

- Twenty-four percent (21/88) of Kick the Nic participants reported quitting.
- Sixty-five percent of this group quit for two weeks or less.
- The remainder quit for three weeks or more, to a maximum of ten weeks.

An overall assessment of the pattern of results suggests that addiction to tobacco occurs very quickly and that the reasons for smoking evolve quickly from a social issue (to fit in) to an issue of addiction.

For those students who had quit, Kick the Nic was a huge success.[6]

Respondents appeared to be very confident that they could quit smoking for good, for a while, or that they could cut down on their smoking.

Helpful components of Kick the Nic

Overall, about 60% of the program participants found the Kick the Nic program "helpful" or "very helpful."

Program components that were most helpful to those who had quit included

- coping strategies
- Cope Kit
- lesson on why one smokes
- learning exercises

Barriers or challenges to quitting/reducing tobacco use

The most significant barrier to quitting or cutting down was the number of friends who smoked. The number of individuals

6 According to one review of the literature (Mermelstein, Colby, Patton, Prokhorov, Brown, Myers, 2002) most adolescent cessation programs are characterized by little success. Quit rates were identified as low and were primarily around 20%. However, some studies suggest that cessation programs may be effective in reducing tobacco use. In one study (Dino, Horn, Goldcamp, Fernandes, Kalsekar, Massey, 2001) there was an overall reduction rate of 53.2% for weekday use and 74.3% reduction rate for weekend use. A second study (Coleman-Wallace, Le, Montgomery, Blix, Wang, 1999) indicated and overall quit rate of 15% and a significant reduction in the amount of cigarettes used daily.

in the household who smoked was a barrier that approached significance. These findings indicate the importance of peer influence in quit attempts.

Some youth provided reasons for their lack of success. Most reasons related to stress (e.g., death of a family member, peer pressure, moving, exams, work, inconvenient time). For youth who had reduced or quit, they commented on situations or issues that might sabotage their success.

Youth acknowledge that turning 18 and the widely accepted social practice of alcohol consumption pose a challenge to tobacco reduction/cessation. For others, living in a household with people who smoke posed a constant challenge.

These youth emphasized that removing their source of tobacco (from friends or family) would make no difference. "It's an individual thing," they said "all up to the person whether or not they want to quit."[7]

"If they want to quit they will quit. Nothing that AADAC does will help or hinder. It is completely up to the individual. This program isn't going to make anyone quit."
– Kick the Nic participant

"It's harder for me when I'm at home 'cause my Mom smokes."
– Kick the Nic participant

"My boyfriend always brings me cigarettes."
– Kick the Nic participant

"When I drink I smoke non-stop!"
– Kick the Nic participant

Conclusions

Kick the Nic helped youth to quit or reduce smoking, encouraged peer support, reinforced learning about the harmful effects of tobacco, and provided strategies and tools to help participants quit or reduce smoking.

Almost one-quarter of Kick the Nic participants quit smoking, and 51% reduced the number of cigarettes they smoked. This, however, is only among those who completed the program. It is not possible to estimate the success rate among all those who started, but did not complete the program. Participants were quite confident that they could maintain their cessation and reduction efforts.

The results also indicate that youth are worried about the health consequences of using tobacco. Other motivations for wanting to quit have been identified for both male and female participants. Identifying friends who smoke as the most significant barrier to quitting is an important finding and emphasizes the importance of peer support in cessation programs. Role models, such as Barb Tarbox, influence youth. Youth believe that Kick the Nic has increased awareness of the importance of quitting. Recognizing high school students' efforts to quit seems to make good sense from both a health and education point of view.

7 This finding is not fully supported in the literature. Wakefield, Chaloupka, Kaufmann, Orleans, Barker & Ruel (2000), for example, suggest that restrictions on smoking at home, more extensive bans on smoking in public places, and enforced bans on smoking in school may reduce teen smoking.

Table 9. Summary of the Intended Program Outcome and an Assessment of the Level of Achievement

Intended Outcome	Level of Achievement		
	Yes	No	Promising*
Schools are aware that the program is available			✔
Participants attend the program			✔
Participants are educated about the quitting process	✔		
Information is provided to change participants' knowledge and attitude about tobacco	✔		
Participants build coping and stress management skills			✔
Participants are provided with a supportive environment to attempt to quit smoking			✔
Participants build confidence for future quit attempts	✔		
Relationships are built between AADAC and local schools			✔
There is short-term reduced tobacco use among Alberta high school students			✔
Participants have increased confidence in their abilities to quit smoking			✔
Participants have more positive expectations associated with quitting			✔

*Promising means the intended outcome was neither achieved nor not achieved, but rather some changes need to be made to achieve the intended outcome.

Contributions to the Alberta Tobacco Reduction Strategy

Evaluators concluded that Kick the Nic contributes to the cessation and reduction goals of the ATRS. Assessing the extent to which this outcome has been achieved, however, is limited by the high drop-out rate for the program.

Recommendations from the evaluation

1. AADAC should continue to implement Kick the Nic in Alberta schools.
2. Recruitment efforts should begin as early as possible and should include active recruitment of youth outside schools (e.g., youth groups, places in the community where youth gather).
3. Recruitment methods and success rates should be recorded and reported. This allows links to be made between the method of recruitment, response to recruitment method, and final inclusion rate based on recruitment method.

4. Track the number of sites that deliver Kick the Nic and the number of participants (including those who did not complete the program). This will also allow for correlations to be made between results and recruitment.

5. Kick the Nic appears to be more effective for those with less severe tobacco addiction problems. Other cessation strategies, in combination with Kick the Nic, should be considered for those with more severe addiction.

6. Explore the reasons for the high attrition rate. Follow-up with those who do not complete the program can provide valuable information to improve the program.

7. Evaluation materials developed for the Kick the Nic program should be revised. This includes asking a common set of questions regarding tobacco use at pre-and post-survey, incorporating Stages of Change, and significantly reducing the complexity and length of the evaluation package.

8. Inform schools of the evaluation results in order to encourage more schools to participate in the program.

9. Use facilitators' and youth suggestions to improve the Kick the Nic program.

10. Both project implementation and evaluation processes required considerable project coordination and management time on the part of the program coordinator (AADAC), evaluation project manager (AADAC), TRCs (AADAC), facilitators, and evaluators. These processes should be reviewed and streamlined for increased efficiency.

11. Further research should be conducted to determine cessation and reduction rates using different levels of intervention (that is, numbers of sessions per week). Appropriate benchmarks and indicators of success need to be developed for different intervention strategies.

12. Conduct follow-up at specified periods of time (e.g., 3, 6, 9 months) to establish longer-term impact of Kick the Nic.

13. Record relapse rates to contribute to the literature base on the relation between relapse and abstinence.

FUTURE IMPLICATIONS

The results, conclusions and recommendations identified by the Evaluation of the ATRS Tobacco Cessation, Prevention and Protection Programs for Youth have several process and outcome implications for future program planning. The AADAC Tobacco Reduction Unit has reviewed these recommendations and is currently incorporating them into the four youth tobacco reduction programs. These changes are intended to improve the quality, merit, feasibility, and appropriateness of these programs for youth in Alberta.

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APPENDIX A

AADAC acknowledges the support and participation of the following communities and school jurisdictions, without which the evaluation of the four provincial AADAC youth tobacco cessation, prevention and protection programs would not have been possible.

List of communities in Alberta that had one of more of the four youth tobacco programs implemented

Table 1. Name of Communities in Alberta

Airdrie	Altario	Athabasca	Banff
Bashaw	Bassano	Bow Island	Bowden
Boyle	Brooks	Burdett	Cadotte Lake
Calgary	Camrose	Canmore	Caroline
Caslan	Cold Lake	Coleman	Cremona
Didsbury	Dixonville	Donnelly	Duchess
Edmonton	Erskine	Exshaw	Foremost
Fort McMurray	Rimbey	Fort Vermillion	Glenevis
Grande Prairie	Grassland	Grimshaw	High Prairie
Hinton	Innisfail	Jasper	Jenner
Lac La Biche	Lacombe	Leduc	Lougheed
Medicine Hat	Milk River	New Sarepta	Newbrook
Olds	Onoway	Oyen	Peace River
Penhold	Pincher Creek	Ponoka	Red Deer
Fort Saskatchewan	Rocky Mountain House	Rolling Hills	Redcliff
Seven Persons	Sherwood Park	Slave Lake	Smith
Spruce Grove	Spruce View	St. Albert	Stettler
Stony Plain	Sundre	Sylvan Lake	Tofield
Vermilion	Wetaskiwin	Whitecourt	

APPENDIX B

List of School Districts/Divisions in Alberta that had one or more of the four youth tobacco programs implemented

Table 2. Name of School District/Division in Alberta

Aspen View Regional Division #19	Battle River Regional District #31
Black Gold Regional Division #18	Calgary School District #19
Parkland School Division #70	Clearview School Division #71
Fort McMurray School District #2833	Grande Yellowhead School District #35
Grasslands Regional Division #6	Edmonton School District #7
High Prairie School Division #48	Lakeland School Division #150
Horizon School Division #67	Medicine Hat School District #76
Northern Lights School Division #69	Chinook's Edge School District #73
Peace River School Division #10	Prairie Land Regional Division #25
Prairie Rose Regional Division #8	Wolf Creek School Division #72
Canadian Rockies Regional Division #12	Calgary Roman Catholic Separate School District #1
Edmonton Catholic Separate School District #7	Elk Island Catholic Separate School District #41
Fort McMurray Catholic School District #32	Greater St. Albert Catholic School District #29
Holy Family Catholic Regional Division #37	Medicine Hat Catholic Separate Regional Division #20
St. Thomas Aquinas Roman Catholic Separate School District #38	St. Albert Protestant Separate School District #6

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